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PROBLEMS OF DEVELOPMENT AND ORGANIZATION
OF HUNGARIAN BUILDING INDUSTRY

Statiztikai Szemle, Vol XXXIII, No 4
Budapest, Apr 1955

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The rapid expansion of the Hungarian building industry has raised numerous problems of organization, many of which have already been solved. Some of these problems, however, such as the organizational setup and geographical breakdown of the industry and the method of management, have not yet been solved. These are essentially the problems which Laszlo Zoltan examined in his article, "Situation of the Building Industry in Hajdu-Bihar Megye," published in the January 1955 issue of Statiztikai Szemle. Analysis of his data permits deductions as to the operation of the building industry of Hungary as a whole.

Zoltan's conclusions are generally correct. It is definitely true that among the difficulties of the nationalized building industry, unsound organization and deficiencies stemming therefrom rank foremost, and that two other difficulties, namely, scarcity of manpower and substandard management, must also be mentioned.

In addition to the foregoing, however, certain other deficiencies are causing trouble. These include the facts that the facilities of the industry are widely scattered, the planning of building activities is deficient, etc. The present article is devoted to an examination of these problems, which are not analyzed in Zoltan's article. It also includes data on the long-range trend of the building industry.

Manpower

The rate and extent of the development of the building industry are best illustrated by the growth of manpower. During the 20-year period between the two world wars, the number of wage-earners employed in the building industry were as follows:

<u>Year</u>	<u>No of Wage-Earners</u>
1920	64,798
1930	112,373
1940	102,754

The above figures are not entirely correct, because, during the period 1920-1940, approximately 15,000-20,000 unemployed building workers must be added. Thus, during the above period approximately 120,000-130,000 building workers were available. It is characteristic that their total earnings in 1920 represented only 1.7 percent of all wages and 9.7 percent of all industrial wages. Although the number of building workers practically doubled by 1930, their wages still represented only 2.8 percent of total wages and 12.9 percent of industrial wages. After the mid-1930s, building activities and the number of building workers declined, reflecting war preparations.

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In these years Hungary's building industry was a typically small industry. The 100,000 workers and self-employed artisans were distributed among approximately 25,000 enterprises. According to 1920 and 1930 census figures, the building enterprises may be broken down by number of workers as follows:

	1920	1930
Building enterprises without employees	17,973	15,012
Building enterprises employing one worker	3,749	4,000
Building enterprises employing two workers	1,577	2,384
Building enterprises employing 3-5 workers	1,292	2,043
Building enterprises employing 6-10 workers	365	521
Building enterprises employing over 10 workers	248	321
Total	25,134	24,001

Obviously, the small average size of the enterprises was not suitable to reconstruct the country after the war and to execute the large building projects of the Three-Year and Five-Year Plans. A change occurred only in 1948 when building enterprises numbered 19,088 and building workers 96,336.

The following table contains a breakdown of the manpower according to worker categories:

	1920	1930	1940	1948
Self-employed artisans	28,240	22,674	24,288	19,088
Office workers	1,254	2,511	1,912	3,556
Members of family employed	124	175	44	704
Foremen	981	1,086	1,042	--
Apprentices	3,815	10,023	7,405	5,216
Helpers, day laborers	25,217	74,296	67,203	66,931
Servants [sic]	1,067	1,608	806	--
Total	64,708	112,373	102,754	96,336

The Three-Year and Five-Year Plans necessitated the creation of a mechanized, large-scale building industry. The core of this industry was formed by the few enterprises which employed over 100 workers and which were nationalized under law No XXV of 1946. Manpower was recruited at first from the small-scale building industry and later largely from agriculture. The volume of building activity and, concomitantly, the number of building workers began to rise rapidly in 1949 and reached peak level in the spring of 1953 at 360 percent of the 1949 figures. During the same interval, the manpower employed in the small-scale building industry declined to one tenth of the 1949 figure. As a result, the remaining small number of independent artisans was insufficient to satisfy the home-building requirements of the population. The distress of the population was heightened by the fact that even the independent building cooperatives were, contrary to their mission, engaged largely in government work.

The development of the building industry was characterized not only by the increase in manpower, but also by the introduction of power machines. While previously hardly 100-150 building enterprises possessed even such simple machinery as concrete mixers, elevators, and windlasses, the nationalized building industry was equipped with machinery totaling 100,000 horsepower by the end of 1954. This expansion was made possible by the appropriation of close to one billion forints for investments in the building industry in the course of the Five-Year Plan.

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However, several unfavorable factors appeared in the course of the rapid development of the building industry: the independent artisan cooperatives were diverted to work on nationalized building projects (their work represented 10 percent of the work of the nationalized building industry during the Five-Year Plan) and the organization of the nationalized building industry followed an unsound development. Thus, at the end of 1953, jurisdiction over the building enterprises was distributed among 17 ministries and major authorities, as shown in the following table:

	<u>% of Total Volume</u>
Minister of Building	42.0
Minister of Transportation and Postal Affairs	22.0
Minister of City and Town Economy	5.5
14 other ministries and major authorities	4.5
Buildings erected by the owners themselves	18.0
Buildings erected by artisan cooperatives	3.0
Buildings erected by private artisans	5.0
Total	100.0

Aside from the resulting unwieldy organization and bureaucracy, the building industry was plagued with labor scarcity and excessive labor turnover. For example, manpower in the nationalized building industry changed approximately 1 1/2 times per year, and the number of workers leaving their employment arbitrarily was over 20 percent of the total manpower in 1952 and 1953. In addition, the result of the large-scale employment of agricultural labor was that, while prior to nationalization approximately 50 percent of the manpower in the building industry were skilled and trained workers, this ratio dropped to 40 percent after nationalization.

Overexpansion of the administrative apparatus is indicated by the fact that, while the ratio of productive workers to administrative personnel was 100 to 10-12 in 1949, it is currently 100 to 30.

As a result of the economic regrouping following the June 1953 resolutions, the building industry lost a substantial part of its manpower. Most of the trained workers went into small-scale industry, although migration to agriculture was numerically the largest. The distribution of building workers from 1952 to 1954 is indicated in the following table (in percent of the total):

	<u>1952</u>	<u>1953</u>	<u>1954</u>
Nationalized building industry	76.0	70.5	61.4
State and cooperative building activities without outside help	19.0	22.4	23.0
Building cooperatives	3.0	3.2	4.5
Private building industry	2.0	3.9	11.1
Total	100.0	100.0	100.0

By mid-1954 it became evident that, because of labor scarcity, the nationalized building industry would not be able to complete the plans and that, consequently, the planned tasks would have to be scaled down. During the fourth quarter of 1954, only one third or one fourth of the requisite manpower was working on the building projects. Completion of the projects was thereby excessively delayed, resulting, in part, in an increase in production costs and a concomitant loss in each quarter of 1954.

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According to data supplied by three ministries (Ministry of Building, Ministry of Agriculture, and Division X of the Ministry of Transportation and Postal Affairs) which are responsible for the bulk of current building projects, only 10-12 workers per project were employed in the fourth quarter of 1954. The number of workers employed on these projects as of the beginning of the fourth quarter of 1954 is broken down in the following table:

No of Workers per Current Project	% of Total Projects	% of Total Workers	% of Total Budgeted Construction Cost	Average No of Workers Per Project
10 or less	67.0	14.2	33.7	2.6
10-20	15.2	18.3	13.8	14.9
20-50	13.2	32.8	23.4	30.6
50-100	3.3	17.6	16.3	65.3
100 or more	1.3	17.1	12.8	162.1
Total	100.0	100.0	100.0	12.3

The main source of trouble is the simultaneous employment of the reduced manpower on a large number of construction projects, resulting in serious delays in completion. As a result, even the reduced 1954 construction plan was not fulfilled and the completion of the 1955 investment plan is jeopardized.

Planning

To eliminate the foregoing deficiencies, the planning system of the building industry should be revised from two viewpoints. On the one hand, it is necessary to examine the methods which the National Planning Office, the individual ministries, and the enterprises employ in drawing up their building plans. On the other hand, it is necessary to clarify the question of whether the technical planning serves the economical functioning of the building industry as a whole, in addition to the satisfactory construction and repair of specific building projects.

In connection with technical planning certain problems concerning long-range investment planning must be solved. Such plans are nonexistent, however, although they would logically form the basis for a long-range plan of the building industry, including the coordination of building projects in location, time, priority, and the availability of building materials and manpower. The current practice, including the system of "contracts with the authorities," is no substitute for a planned system of investments. Under the proper system, contrary to current practice, at the same time or shortly after approval of the investment and reconstruction plan figures of the individual ministries, the building ministries should prepare a "building list" containing the specifications of the most important projects to be built. Establishment of this building list would obviate long disputes between the originating and building authorities, delays in the completion of projects, and frequent changes in specifications. Building lists are used in the USSR also. By proper scheduling, the national economy could be spared a recurrence of the events of 1954, when nearly as many dwellings were completed during the last 2 months of the year as in the preceding 10 months together.

As regards the technical plans, the building enterprises are often prevented from starting work by the lack of documentation. Although the National Planning Office is familiar with this problem, no steps have been taken to improve the technical planning work. By drawing up a long-range investment-building plan the building enterprises would be enabled to prepare documentation in advance and to improve their organization.

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Reorganization

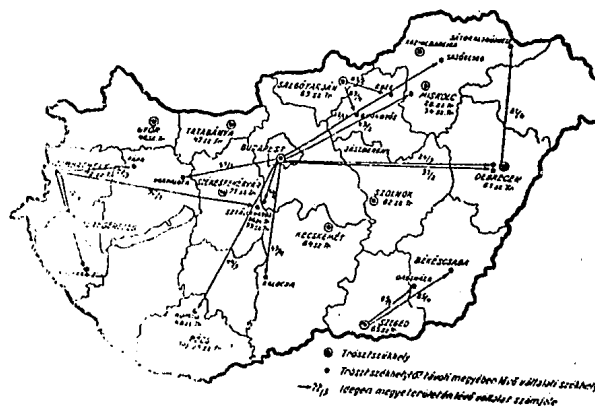
Zoltan, in his article, breaks a lance for the reorganization of the building industry on a geographical basis, a view which had, until recently, many opponents in the government.

When the large trusts of the Ministry of Building were organized in 1951, the view prevailed that building enterprises of the same character and with similar technical equipment should be placed under the jurisdiction of the same trust. It is, however, true that, to a lesser degree, efforts were made to set up a common supervisory organ for all building enterprises operating in each megye. In the course of later developments these views were not implemented completely. The trusts lost their specialized character during 1952 and 1953, since no important difference existed between their technical facilities, and each trust was constructing factories, dwellings, and other buildings.

After the establishment of the trusts, the operational guidance of building activities became entirely detached from ministerial supervision, because three "directing" organs (Ministry, county, and chief construction superintendent) operated between the ministry and the construction project. This complicated organization made economic and technical supervision difficult and also resulted in a rise in building costs. Another disadvantage was the fact that many enterprises were located at a distance of several hundred kilometers from their trusts. In 1952, for example, approximately 50 percent of the trusts of the Ministry of Building had their headquarters in Budapest, while 70 percent of total construction was performed outside Budapest.

The mistakes committed in the organization of the building trusts are illustrated in the following map:

Distribution by Location of Trusts Operating
Under the Ministry of Building and Certain Enterprises
Located at a Distance From Their Trusts



- Seat of trust
- Enterprise located in a distant megye from the trust
- 72/3 Enterprise located in a different megye from the trust

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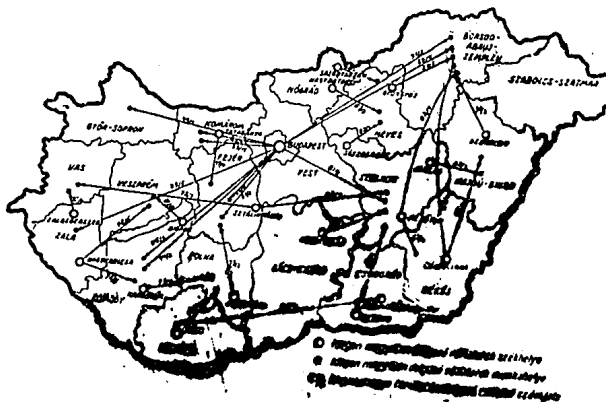
The situation was similar with regard to enterprises and building sites. Numerous enterprises were in charge of construction projects which were located as far as several hundred kilometers from the headquarters of the enterprise concerned, resulting in poor management and supervision and an increase in administrative expenditures.

The overhead expenditures of some enterprises of the Ministry of Building during the first three quarters of 1957 were as follows (overhead expenditures of the ministry equals 100):

<u>Building Enterprises</u>	<u>Overhead Expenditures</u>
No 65/5	157.1
No 62/4	143.5
No 5/1	127.3
No 42/2	117.6
No 23/5	110.1
No 23/4	107.3
No 21/3	104.7

Lack of a building list, which would include the geographic distribution of building projects, led to a large increase in so-called "crosswise" assignments, as indicated in the following map:

Building Sites Located at a Great Distance
from the Headquarters of the
Building Enterprises



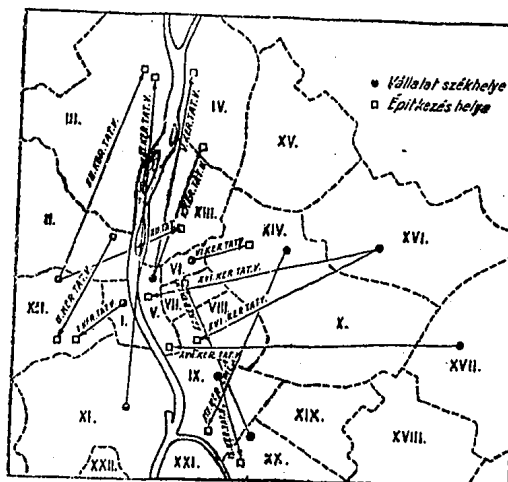
- 65/5
- Headquarters of building enterprises
 - Construction sites of building enterprises
 - Enterprises operating at a distance

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Disregard of the geographical assignment of building projects is also indicated by the following figures showing the distribution of the 82 building sites of the enterprise of Trust No 21 of Budapest in the second quarter of 1953: Budapest 46, Pest Megye 11, Fejer Megye 6, Veszprem Megye 3, Heves Megye 6, Borsod Megye 5, Hajdu-Bihar Megye 1, Zala Megye 2, and Komarom Megye 2. The building sites of the enterprises of Trust No 30 were located, on an average, at the following distances from Budapest, the headquarters, in the second quarter of 1953: Enterprise No 30/1, 130 kilometers; Enterprise No 30/2, 147 kilometers; and Enterprise No 30/3, 150 kilometers. In its report on the second quarter of 1953, Trust No 65 explained the nonfulfillment of its plan in the following words: "The main reason for the nonfulfillment of the plan was lack of operating area. As a result, some of our enterprises accepted work at a distance of several hundred kilometers from their headquarters. (for example, the Bekescsaba enterprise at Kazincbarcika and the Hodmezovasarhely enterprise at Komlo)."

For similar reasons, supervision of the building and building-repair enterprises of the Budapest City Council (operating under the Ministry of City and Town Economy) has become impossible, as the ward councils could not supervise the bulk of the work of their enterprises because these were working in other wards. This situation is illustrated in the following map (on the basis of incomplete data):

Certain Work Sites of the Building-Repair Enterprises Operating Under the Jurisdiction of the Building Directorates of the Budapest City Council in June 1954



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Building and building-repair enterprises of local councils often perform work outside their own areas. The Building-Repair Enterprise of the fifth ward [Budapest], for example, was working in the following wards in June 1954 (figures in parentheses denote number of projects): wards No IV (2), VI (1), VII (1), VIII (1), and XIII (2). At the same time, six building-repair enterprises of other wards were working in the fifth ward. The situation is similar throughout Budapest.

Recently because of the poor distribution of building sites, numerous building workers had their permanent residences at a great distance and had to be assigned temporary living quarters in worker hostels. These quarters were often unsanitary, which resulted in large-scale personnel turnover. It helped little that under the collective agreement each worker was entitled to a trip home every other week at the expense of the enterprise. The passenger and special workers' trains are so crowded that a long trip means only exhaustion for the traveler.

The distribution of the workers of two Budapest building enterprises (No 22/2 and 23/2) according to residence is typical: at the end of 1953 the workers of these enterprises numbered 982, of whom 244 were residents of Budapest and 738 were out-of-town residents. One round trip home by all out-of-town residents would have totaled 220,484 kilometers. The distribution was as follows (figures in parentheses denote number of workers): 1-50 kilometers (98), 51-100 kilometers (167), 101-200 kilometers (248), and over 200 kilometers (225). Nonresident workers included some who lived as far as 368 kilometers from Budapest. It is characteristic of recruitment methods that these two Budapest enterprises employed also workers whose permanent residence was near important projects under construction.

The present unsound situation would obviously not have arisen if the local distribution of building trusts and enterprises had received proper consideration and building sites had been coordinated with locally available manpower. That this was not the case is revealed by a comparison of the geographical distribution of construction projects and construction workers (in seven megyek) in 1953 (in percent of the total for the country):

	Distribution of Construction Projects Planned for 1953	Distribution of Construction Workers, Mid-1953	
		By Trust Headquarters	By Enterprise Headquarters
Budapest and Pest Megye	28.2	51.8	45.5
Baranya Megye	7.8	5.5	5.5
Komarom Megye	4.1	2.2	2.2
Somogy Megye	2.4	0.4	1.3
Vas Megye	0.5	3.0	1.0
Veszpremi Megye	5.9	0.2	2.5
Zala Megye	3.8	0.4	1.5

Because of the rapid decline in the number of construction workers during 1953 and 1954, the poorly organized and disproportionate intermediary apparatus could no longer be maintained. Consequently, a large number of trusts and enterprises were discontinued, merged, or reorganized. This action, carried out by the end of 1954, remedied only some of the ills of the building industry, however, and the difficulties continued to mount.

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In 1953, efforts were made to overcome the difficulties by transferring enterprise headquarters to new locations. This approach to the problem, however, proved fruitless. The most characteristic example in this connection is the case of Enterprise No 1 of Trust No 72 of Szombathely. The enterprise had its headquarters and most of its work at Sztalinvaros but was transferred to Szombathely. The enterprise, of course, was now closer to its supervisory trust, but new difficulties arose. While previously some of the enterprise's construction sites in Vas Megye caused technical difficulties and an increase in costs, after the move the supervision of the construction sites at Sztalinvaros became the source of the same troubles. Obviously, subordination of construction sites to the local enterprise would have been the right solution.

The decision to reorganize the nationalized building industry has not yet been implemented, although it appears advisable to set up more economical organs for the supervision of building projects. The Council of Ministers has issued several resolutions to attain this object. For example, in its 1 March 1953 resolution it stated that the principal task of the building co-operatives is building maintenance and the construction of small building projects not exceeding 30,000 forints in value. Its resolution 502/4 of 1953 ordered the merger of road maintenance enterprises. Several resolutions concerned the reorganization of trusts, the regrouping of enterprises, and other organizational problems of the building industry. These resolutions, however, usually dealt only with details and have, moreover, not always been implemented. Essentially, therefore, no fundamental action has been taken for the proper reorganization of the nationalized building industry and for the definition of the tasks and scope of the private and cooperative building industry.

The necessity of a reorganization of the building enterprises on an area basis and the difficulties inhering in the centralized supervision of construction activities have been more and more recognized during the last 2 years. An important step forward was taken in the 2 November 1954 resolution of the Council of Ministers, which decreed that eight trusts of the Ministry of Building should be reorganized into megye enterprises as of 1 January 1955, thereby "establishing in each megye a single general building enterprise with subordinate construction managements in each jaras."

In addition, it would be extremely important to examine the possibility of merging the new organs of the Ministry of Building with the building enterprises operating under the other ministries. Should the latter enterprises be maintained intact, then the situation would be virtually unchanged, namely, construction work in each megye would still be performed by enterprises operating under the jurisdiction of 8-10 ministries.

The recent trend of the organizational changes in the building industry is undoubtedly favorable. Abolition of part of the trusts has brought the construction projects closer to high-level supervision and should result in improvement of the guiding and supervisory work of the ministries of the building industry. The situation has also improved in respect to the average size of building enterprises. The large number of small enterprises, each employing a few workers and possessing inferior equipment, have been displaced by fewer but larger enterprises which can be better supervised. The effect of the changes may best be measured by the increase in average manpower per nationalized building enterprise:

	<u>31 Dec 53</u>	<u>31 Dec 54</u>
Ministry of Building	460	847
Ministry of Transportation and Postal Affairs	1,055	1,660
Ministry of City and Town Economy	228	218
All nationalized building enterprises	533	655

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Examination of the data shows, however, lack of improvement and unsatisfactory conditions in the situation of the building enterprises of the local councils operating under the Ministry of City and Town Economy. The task of these local enterprises consists of building repair and the construction of small buildings. The following statements, made by N. S. Khrushchev at an All-Union conference of construction workers, are applicable to these enterprises: "We must begin to merge the building enterprises. In this connection, a highly enlightening experience was gained at Moscow, where a single enterprise, the Glavmosstroy, was formed from 56 building trusts which had operated under the Moscow Soviet, the ministries, and the chief directorates. In the course of negotiations for the establishment of this organization, certain remarks were made to the effect that the Moscow Soviet would not be capable of directing such a huge organization. Some people were apprehensive as to the implementation of the housing program if the ministries were excluded from this matter. Housing construction this year, however, shows that the new enterprise has made great progress. Its work conforms to schedules, and it makes use of its workers according to their technical training."

Evidently, many people ask what form the new organization of the nationalized building industry should take. The answer is not easy. The tasks of the building industry in 1956 and subsequent years are not known in detail as yet; accordingly, the organizational form of the nationalized and local building industries cannot be specified at present. Some basic factors, which should form the basis of the most urgent action, may be laid down, however. Aside from the principles, correctly formulated in resolution No 2,080/28/1954 of the Council of Ministers but so far not entirely implemented, it would be advisable to subordinate the new unified organization of the nationalized building industry, at least in great part, to the jurisdiction of the Ministry of Building. Other ministries and major authorities should retain jurisdiction mainly over specialized building organs engaged in such work as geological research, deep drilling, major road and railroad construction, road maintenance, etc.

The reorganization of the nationalized building industry should be geographic in principle. Each area should have a national enterprise with sufficient capacity to satisfy all construction and reconstruction requirements. For the construction of exceptionally large projects, such as the Sztalin Iron-works, Kazincbarcika, Komlo, etc., a few large building enterprises will, of course, be needed to carry out the construction work in these localities exclusively. Some well-equipped enterprises will also be needed, to perform specialized construction work throughout the country.

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